Notes from Community Networking Session #1: Wednesday Sept. 23 CVB Public Meeting: 1998

Group 1: John Thomas 202-463-1260

These notes were kept based on individual participant's comments: For sake of anonymity, no names are used--just numbers of participants:

Q1: Safety

Participant 1: What's this question about?

P 2: owners frequently assign blame to vaccine--in part my history of xxx xxx book; labeling requirements xxx what information can say;

P3: different standards for different customers;

P4: xxx protect--get questions about safety;

P5: public is confident--reactions are anonomly;

P6: safety testing are good xxxxx

- a) regulatory requirements for safety are valid;
- b) public confidence is high;
- c) public recognize problems can be anomalies;

Q2: Efficacy

P1: expectations are unrealistic; expect 100%; use wrong vaccine but conclude not effective;

P2: lots of off-label use--so some are more realistic; don't know when to blame vaccine or bug;

P3: need to do more in host species;

P4: efficacy standard is a # level of JGG--what relationship to *foul's* xxx?

- --unrealistic expectations--want 100%; customers don't know whether vaccine or organism;
- --food animal customers are more realistic: expectations, confidence higher;

Q3: Availability

P1: May want cheaper, may want more sales locations; what's not available is pet birds, FIV in cats, protozoan diseases in *catfish*;

Do we need to do more disease prevention in food animals to prevent human diseases?

Will have to deal with aquaculture needs over next decade;

- 1) cheaper, more stores;
- 2) Niches;
- 3) Future problems or issues--aquaculture; food safety responsibilities;

Q4: What works? What doesn't?

P1: licensing problem: regulations set for one species, applied to other species inappropriately--bovine to equine;

P2: indicates lack of flexibility--need an advisory panel?

P3: Is there a mechanism to adjust the rules?

P4: Need standard--to have consistent requirements for different companies & different reviewers; but regulations have too many out-of-date details--e.g., labeling.

P1: team review for new products;

P5: need consistency xxx xxx to adapt to new technologies and knowledge; need to have consistency of results between companies and reviewers; need to have flexibility to incorporate new technology, knowledge,

Possible Improvements:

Advisory panels; cull regulations to eliminate trivial, out-of-date regs.; team review of new products to build consistent basis;

Group 2: Tim Miller: 402-475-8114 tmiller.lnk@ispi.net

Q1: Safety

- --We are confident they are safe within the 9 CFR guidelines and realize additional safety claims could be developed within the limits of technology today.
- --Safety records are good;
- --Category: site reactions--off & on label, immediate or delayed;

Are we training appropriately?--for vaccine use

- --Delayed site reactions--vaccines inducing sub-clinical or clinical symptomology;
- --Recombination and use of modified live vaccines;

Q2: Efficacy

- --Confident that the U.S. record for safety & efficacy is good;
- --Efficacy criteria needs to evolve as technology increases;
 - --use of technology to judge or score differentiation between vaccinated and non-vaccinated animals;
- --current tests are artificial in that seronegative animals are used; This leads to: off-label use (vets needs are different than xxx); efficacy criteria changes in the field vs. artificial environment; cost-effective issues place different demands on efficacy; 60% efficacy my be enough; expectations are different between vaccines; clostridials different than respiratory;
- --category concerns: off-label use--do not believe label claims, conduct on trials; modify tests to meet their own requirements; need more education on use of vaccines;

Q3: Availability

- --All agreed there are no U.S. regulatory delays or issues;
- --Delays occur on some international markets when APHIS approval is required first;
- --No problems for producer to veterinarian to consumer;

Q4: What works? What doesn't?

- --One administrator should provide one voice for reporting to U.S. and that administrator should be in Ames;
- --CVB-L: <u>Positive</u>: Accessibility of labs and resources; a testing service is available to check seeds and serials;

<u>Need:</u> Better testing, more consistency, perhaps in quality assurance; revise mission statement for workload focus;

--CVB-IC: Positive: Work with you--flexible;

<u>Need:</u> All 2008's need to be reviewed and inspected post licensing; Put responsibility on firms, free-up resources;

Put in reviewers (LPD) 50% outlines and labels;

--CVB-LPD: <u>Positive:</u> 21 day turnaround for free sales certificates;

Availability for development of process;

Need: More reviewers, more consistency (reviewers)--laboratory consistency; turnaround time; experience and capability--retention of staff; risk assessments; permit issues;

Group 3: Arlo Millen 913-851-2689

Q 1: How confident are you in the safety of veterinary biological products? Overall felt safe; Feline product reactions, fibro surcoma issue, injection site The real issue is in defining safety. We are moving away from safety as related to death and becoming more specific regarding injection reactions, sarcomas, etc.

Safety concerns need to be redefined to include items other than death. For veterinarian to be of assistance, the veterinarian needs to devise a standardized mapping technique to better define specific issues of safety.

A standard mapping system for antibiotics & vaccines would be useful. Education of the veterinarian/consumer on the reason for this mapping. Allow accurate information of where/what the problem really is. (Epidemiology)

- --Specifics to mapping reporting system--i.e. vaccines in right leg--epidemiology--for safety of the product.
- --Combination testing of vaccines. (via client/vet information)
- --Initial 3000 head field test--possible cross vaccination problem.
- --MISS--Application of uniformed administration of vaccines by vets
- -- Lack of education could be addressed by NVSL to the end user (vets)
- **Q2:** How confident are you in the efficacy of veterinary biological products?
 - --Methods of complaints in system is well-defined. One place for coordination
 - --How much post-licensing work is done
 - --Not in vaccines themselves but how used
 - --Have been shown to work against the organism that we licensed
 - --Small animal--seem to have very few failures
 - --Better diagnostics to define what the problem is
 - --Poultry: strain variant developed relatively quickly

Ery, strep equi, PRRS, Strep suis, canin parro

Manufacturing problem or herd management

Q3: Are veterinary biological products readily available to the veterinarians and/or animal owners who need them?

--Some products are needed however due to small number of doses & regulatory time & economies

Ferrets--distemper vaccine

Feline--FIV market to small possibly the science isn't there yet

Development of products that aren't really needed;

- --A yes question with the exception of *lessor* species: this problem will probably grow due to mergers in the industry.
- --Diagnostic kits--not really good tests and many antigens are not yet available in kit form to be used in field:

Q4: As you reflect upon the CVB testing/inspection/licensing process, which aspects work well in your opinion? Which aspects need improvement?

A. Licensing:

Problem with consistency especially in licensing from receiver to reviewer and with same reviewer. Also time frame for reviews

Standardization of terminology; boiler plate language; example *fermentation*, cell culture Handling new types of products: immunotherapeutics

B. Testing:

Reference inventory & new references need to be made

Tests in vivo that the lab wants to test are the products that are backordered.

Random testing appears to be sometimes concentrated rather than random

Standardization of tests, reagents, references

Lepto caniada--in vitro tests; what are delays; finish work ASAP

C. Inspection/Compliance:

Very helpful

Efforts to raise standards--does the standard bar remain the same for the large company vs small company?

Some inspectors attitudes vary from the standpoint of *lying*;

Get back to you when they say they will--very well organized

Group 4: Dr. Belinda Goff: 233-4479: bsgoff @aol.com

Q1: Safety:

Little concern over safety in general; no problems in general

Raw materials & final products are extensively tested

Vaccino-vigilence is a good approach

How to eliminate "bias incentive" (\$, job pressure, etc.)

- a. do we need 3rd party evaluation? e.g., "pre-empt" chick spray containing organisms from hens intestional tract. When 3rd party tested, contained pathogens!
- b. Do we need company QA checks?
- c. Do we need USDA to perform this evaluation?

Q2: Efficacy:

- --Generally efficacy concerns are greater than safety concerns;
- --There are some marginally effective products on the market (wide spectrum of efficacy of marketed products);

- --Are required test animals (e.g. SPF birds) realistic/valid?/ adequate to represent normal populations?
- --Possible difficulties in proving duration of immunity claims...e.g., prove for young, healthy animals vs. aged ones

Q3: Availability:

Why is this question even listed? Complaints?

Time to approval is a problem--especially for "high need" products. Is a "fast track" available?

Q4: What works? What doesn't?

- --Good working relationship with industry: you ask for input and actually listen;
- --Would be good to have one overall director over the three areas (comment from 1 person only);
- --Would be good for CVB to be "stand alone" without having to report to VS (used to be BBEP) (comment from 1 person only);
- --Would be more efficient (need a "buck stops here" person);
- --Sometimes question competency of reviewers--e.g., when company is asked to check eggs of 6 wk. old birds (13-14 wks early!);
- --Sometimes impractical things are being asked of companies;

Scientific basis of some requirements are not sound

Adding to 9 CFR requirements for company sometimes

--Sometimes VB lab not using same testing standards as companies (not being held to same standards)--i.e., VB lab should at least check test according to way company tests per regulations.

Group 5: Richard Sharpee 314-982-3638

Q1: Safety

- 1. Safety has improved in many aspects:
 - -- Companies are taking greater responsibility;
 - --Industry needs to encourage feedback from vets for analysis of complaints in more objective/risk-free manner;
- 2. Small number of animals which react adversely may need further evaluation on a broader genetic base;
- 3. Agency should consider developing adverse event reporting systems similar to ADRs in drug industry to ensure objectivity and completeness of data base on products reactivity. USP system may not be effective due to bureaucracy;

Q2: Efficacy

- 1. Efficacy in general has improved "dramatically" over the past 25 years due to advances in vaccine technology.
- 2. Issue has transitioned to defining the level of immunity induced and what criteria should be used to define "proof of efficacy" especially in determining DOI.
- 3. Agency should be concerned about determining efficacy in field studies rather than using SPF animals for licensing trials.
- 4. Efficacy may be difficult to establish for certain diseases and models demonstrating logical equivalence should be considered.

- 5. DOI is overall largest concern which needs attention but industry will question the cost effectiveness of these studies if consumers not willing to pay higher costs for vaccines with DOIs.
- 6. Information should be provided on all products (new & existing) which demonstrates efficacy in presence of maternal antibody.

Q3: Availability

- 1. Except for limited use bias, products are considered to be readily available to consumers.
- 2. APHIS should consider adopting procedure of company release of serials to save even more time in distribution channels.

Q4: What's working? What's not?

- 1. Turnaround time of submissions is too long. Example: 9 months to review routine outline revisions;
- 2. Lack of consistency in review process between reviewers continues to be a problem;
- 3. Establishing priorities for reviewers appears to improve review process;
- 4. Agency should consider process (manufacturing)validation and test validation rather than testing and inspection post licensing for compliance;
- 5. Facility inspection process continues to be well-managed and effective;
- 6. CVB-L needs to improve lab standards to GMP standards;
- 7. Need to improve new product licensing process in developing licensing requirements. Consider case of external consultant expertise to facilitate decisions on licensing criteria;

Group 6: Laurie Fisher: 402-441-2809: fishell@pfizer.com

Q1: Safety:

- --Concern w/ adjuvants--aluminum hydroxide abscesses
- --Evaluation of adjuvants
- --Alott--breakup--tends to become factor of multivalent single--not reactive
- --Different species--different reactions
- --Safety vs. efficacy

Expectations of safety from the company

Regulations that enforce expectations: Canada--manadatory reporting

Fibrosurcomas in cats

- --What is the acceptable risk? Majority are acceptable but there are reactions requiring investigation;
- --Companies do not want bad PR--companies evaluate trends & reactions
- --Confidence--good program--general testing is acceptable

Testing is satisfactory--changes--allowing use of vaccines in food animals--some areas not allowed

- -- Concerns w/ adjuvants
- --Validation of inactivation
- --Mouse safety test-not good indicator of product safety
- --Increased communication w/ customers
- --Broad policy decisions need reevaluation such as the route of administration in given species;

Q2: Efficacy:

- --Recent products--all efficacious
- --We can identify problem products by breaks in the field; our old products
- --Modified live vaccines--periodic outbreaks of diseases with vaccination programs--may be a different isolate. Are we keeping up w/ changes in strains?
- --Concerns--when product is used off-label; manufacturers can't control this
- --Storage
- -- Need to identify causes of breakdowns
- --Efficacy in the young animal--specific species do not protect. Some animals cannot respond--make sure this communicated

Q3: Availability:

Yes--benefit of competition

New drugs--can get investigation use. We can get conditional licenses to handle new disease U.S. relatively easy--reasonable risk

On international--much more difficult to get on the market

Q4: What works? What doesn't?

- --Communication between three sections is not good;
- --CVB looks at science, understand open for dialogue;
- -- Understaffed in all areas: cannot handle the total numbers of submissions;
- --Important issues--can get reviewers available when needed;
- --Direct communication w/ lab personnel between CVB-L and industry
- -- Agency to agency works well: Canada--U.S.

Harmonization between test laboratories--common test methodologies;

Inspection--many joint inspections--very beneficial;

- --Reagent supply issues--challenge viruses: quantity & quality; SAM assasys--these reagents must be available for industries with global registrations;
- --General confidence is good--general testing is acceptable, however:
 - a. broad policy decisions need to be reevaluated such as the route of administration for given species;
 - b. concerns w/ adjuvants--fibrosurcoma in cats;
 - c. validation of processes that effect safety;
 - d. mouse safety test--not always a good indicator of product safety;
 - e. need for increased communication w/ customers expectations--both directions

Group 7: Paul Coonrod: 860-441-1607

Q1: Safety:

- --Some products are reactive and need improvements;
- --General belief that products are safe;
- -It was felt that poultry products were generally recognized as safe--poultry manufacturer-3;
- --Overall the USDA could be improved but generally ensures safety;

Q2: Efficacy:

- -- Efficacy of products depends on product and types of products;
- -- The market will determine if the product meets expectations of efficacy;

Q3: Availability:

- --Products not available to niche markets (pet birds) because requirements are the same. Conditional license does not meet this need.
- --Low-volume products--testing is disproportionate to high volume products. This creats supply issues within a company if product is held up by testing;

Q4: What works? What doesn't?

- -- Due to long-term budget restrictions CVB-L staff procedures have not kept up with technology;
- --CVB-L tests by SAM when efficacy has been correlated to a different potency assay;
- -- Why does CVB-L ask for samples of every serial when firms maintain retention samples?
- --CVB is open to suggestions and comments;
- -- Move to Ames was seen as a positive thing;

Group 8: Cynthia Louth: 716-774-6671: Life Technologies Inc.

Q1: Safety:

- --We feel confident in the safety & efficacy of the diagnostic kits available;
- --For vaccines, concerns were raised that companies' documentation may not reflect "all" the actual testing results for safety;

Q2: Efficacy:

--Why are vaccine products still failing even though the data submitted supports safety & efficacious products?

Q3: Availability:

Generally available

Q4: What works? What doesn't?

--Need to improve the system for adverse reporting. Same problems reoccurring without the appropriate action being taken to correct them (from a manufacturer & a regulator perspective);

Group 9: David Jayme: 716-774-6771: djayme@lifetech.com

Q1: Safety:

- 3 legged stool (dairy industry analogy): safety to animal and to user:
 - a. Raw material control(source/traceability, adventitious agent testing, process validation);
 - b. Biologic manufacturer (traceability, QA/QC--new technology, predictive models, sampling adequacy);
 - c. Education (end user, veterinarian, livestock, sales)
 (label contacts to mtg/APHIS) threshold/frequency of adverse reaction

Q2: Efficacy:

--What is standard? What is acceptable? What is achievable? Education: 100% not achievable

--What is appropriate model? Universality/International harmonization of reference standards & test methods;

--Efficacy may vary based upon: field use vs. controlled lab studies;

cross impact--diminished efficacy of subsequent treatment;

Q3: Availability:

--Responsiveness to emergent perceived field problems:

--lower efficacy vs. "perfect" vaccine;

--hold harmless with accelerated review (product liability concerns);

Q4: What works? What doesn't?

CVB: Works well: Generic technical support

Allowing free communication between manufacturer & end user;

CVB: Improve: Uncanny ability to select back-ordered product for extended testing (check testing, comprehensive testing);

Accelerated international harmonization;

Increased emphasis on lab testing/science side (test dev. /standard

reagents);

Increased relationship between manufacturer & reviewer;

Increased compliance (mixed response);

Group 10: Robby Robinson: Pfizer: 402-441-2599; ROBINR01@PFIZER.COM

Q1: Safety:

- --Overall the U.S. vet bio system produces very safe vaccines;
- --But with the possible movement to *DNA VX's*, there seems to be more concern over safety when those products should be much safer than xxx products. Somewhat surprising;
- -- Need guidelines for proving safety ASAP--DNA VX's;
- -- May be unique products coming that don't fit the current regulatory systems (plant source VX's);
- --Several members felt DNA Vxs will be safer. But unproven so far, so we don't really know.
- --Still a possibility of a BSE outbreak;

Are preventative systems good enough?

No--there are ways around the regulatory system--global marketing practices!

Farm animal feeds too. Suppliers are even concerned; supplier tests;

And conventional viruses as well;

--Definition of safety needs work to ensure everyones on the same sheet of music;

Q2: Efficacy:

(Back-up: We believe our products are safe & efficacious, but proving it to various authorities is tough given the diversity of safety & potency requirements in different countries. We need harmonized tests!)

- --Overall we feel our products are efficacious, although xxx DOI is still a potential concern;
- -- Concern will compromise safety in trying to improve potency;
- --But what is "efficacy" Obviously tied to claims (disease vs./sign);
- --Differences of opinion exist between producers, customers, & regulators;

Q3: Availability:

- --Yes, for most diseases & combinations;
- --Some owners might not be taking advantages of their availability--cost, bother, awareness of need or avaibility;
- --Safety & efficacy need to be very carefully considered in cases where there's a disease out there but for which there's no product yet.

Risk assessment needs to be a bigger part of the regulatory decision to license new products.

--Staple product availability might be foster over use too. Too many vaccinations? Too much cost pressures? (David Rosen's insight)

Q4: What works? What doesn't?

- --Raw material supplies & testing (official CFR) need regulating;
- --Reviewer consistency;
- --Charge of reviewers during long licensing process is a problem;
- --Overall we like the three-tier system, however, validation of manufacturing and testing might permit less check testing and even firm-release of its products.

Group 11: Rod Little: 217-374-5550

Q1: Safety: ALL AGREED

- --Safety problems are very minimal when used appropriately;
- --Modified converting to virulent;
- -- More prevalent in new products, quickly rectified
- --Certain small amount acceptable, even necessary for efficacy--ALL AGREED
- --Environmental and food safety from vaccinated animals not a concern or issue;

Q2: Efficacy: ALL AGREED

- -- Unanimous agreement in the group that efficacy is not a concern within the confines of 9 CFR;
- -- The products with minimal efficacy are still more that adequate for their designed purpose;
- --Some areas of concern outside 9 CFR we might like to be addressed, for example, interference of immunity due to maternal antibodies;
- -- Real World Testing;

Q3: Availability:

Readily available at reasonable cost, with the exception of rapidly changing antigens such as the poultry & porcine industry;

Q4: What works? What doesn't?

--Inconsistent application of policies;

--Priorities of review for what seems to be simple submissions and the depth of review needed for the response;

Group 12: Dave Carney: 303-295-7527

Q1: Safety

Generally high, but:

- a) TSE's affect blood products: assurity regarding animals products; few complaints; extensive testing; questions about injection site reactions--problem--new areas to review during field testing--better define parameters for food animals. Minority comment: cats and fibrosarcoma and overvaccination;
- b) Animal health distrib.--high faith; adequate--hold on to present standards regarding animal import and coming over border;
- c) reversion to virulence testing by CVB-L--question; Canada--adverse reaction, report required for every --15 days; surprising--200 letters/year;
- CVB-L doesn't sell its results very well; it is relevant re: major effort for adverse event reporting-projects;

Q2: Efficacy

- -- Producer of food animals--maybe too high expectation;
- --100% protection may be unrealistic;
- -- Animal genetics affect performance;
- --Some manufacturers may need more guidance as to parameters from USDA (same claims, same stnds.)
- -- Market has helped determine the true efficacy;
- --Users would like more access to data--but problem w/ misuse;

Q3: Availability

- a) Poultry products--long approved for short disease cycle--long response time;
- b) General (group consensus): Diagnostic--readily available--reasonable approval;
- c) most products good availability;
- d) General (group consensus): new products--some concern: lack of speed of licensing;

Q4: What works? What doesn't?

CVB performances:

- a) general--positive on laboratory;
- b) more concern expressed about pre-license cooperation;
- c) reviewers could benefit from visits to their firms;
- d) Inspection--generally helpful;
- e) difficulties should diminish;

Reviewers: Generally each firm should have expectations of more consistency between reviewers;

Production Outline: WS good approach

Work for harmonization but keep good unique aspects;

Keep final release;

concurrent testing;

Group 13: Lynn Rider 770-536-8787 ext 1204: Lynn.rider@merial.com

Q1: Safety:

- --Never lacked confidence in licensed products as a practioner;
- --Problems that might have arisen years ago could have been due to dosage/usage;
- --There could be better labeling to indicate stress of live vaccine programs to prevent or precaution the reaction of animals and clear warning statements;
- --Regulations are adequate for safety today more than there ever were;
- --U.S. concensus of this group believes the vaccines are safe, but maybe the international countries are not sure why it is safe, but they understand the USDA approval means it's safe;

Q2: Efficacy:

- --What we feel may be safe and efficacious today may not be in the future. They are as efficacious today as they can be with our current scientific knowledge;
- --In favor and in need of autogenous product; they are not required to claim efficacy however some do claim this; we need to bring regulations into a more contemporary science--not tested for efficacy except field efficacy; the regulations they have are not enforced when the autogenous vaccine is sold to someone other than the original person;
- --Food animals--a minimum efficacy in the models are used such as (SPF animals are usually used) in a controlled situation instead of a field situation;

Q3: Availability:

- --They are about 85% or more readily available for demand, however, there may be instances some diagnostics are not available due to economics of manufacture;
- --Back orders or product *ontage* could be a problem;
- --Could be delays in receiving products due to uncontrollable situations such as holidays & strikes;

Q4: What works? What doesn't?

One person prefers to go to a GMP situation without testing by USDA or reexamine the testing process--ex: collaboration on SAMs outdated methods of testing between USDA manufacturers so there are more consistent results between the two; maybe manufacturer sharing developed test/techniques early on to get consistant results;

- --Address surprise inspection process--key personnel may be out and small firms maynot have backup people at the firm tohandle an indepth inspection. Maybe announcement of 10-14 days but for follow-up or a concerned problem audit is understandable;
- --Licensing system for appeals process to go to a board rather than 1 person, especially if you are not working well with a particular reviewer;
- --Reviews take too long;
- --More open & prompt communication from the reviewer. We know they are short budgetted and swamped. Make a definite time limit to review and return & answer work load issues for reviewers:
- --We know the reviewer's work load is burdensome;

- --Do we need to look at user fees or go to congress to allocate more monies for testing and regulations;
- --More uniform communication via phone conversations in response to questions;
- --Could small issues that reviewers do be reviewed such as blueprints; Are they really necessary?

Group 14: Michael Pontknoski 303-295-7527: Colorado-serum@worldnet.att.net

Q1: Safety:

- --Absolutely in general safe;
- --Education of public--not informed enough;
- -- Trade off expecially with MLV of safety vs. efficacy;
- --Safety testing @ serial levels? needless production methods build in safety--so not needed;
- --Autogeneous products--no host safety testing; not as regulated;

Q2: Efficacy:

Group feels products are efficacious--host efficacy data available;

Are products administered @ the same time with multiple agents still efficacious?

- --Public needs better education:
- --Not all animals will respond to vaccination;
- --autogeneous?

Q3: Availability: Yes

Q4: What works? What doesn't?

- -- No coordination w/in three sections:
- --slow turnaround time from reviewers (4-6 month turnover time)
- --continuity of reviewers--inconsistency between reviewers;
 - --what one reviewer may feel is ok--another reviewer may look @ something (i.e. outline of production) and demand major changes;
- --Reviewers need deadline;

Group 15: Michael Luck (207)878-2770 ext 119.

Q1: Safety:

Vaccines: --Live/modified: majority concern--not confident in safety (prey animals,

immunocompetent animals)

- --if not confident, pull from market
- --confidence high except in certain cases
- --Recombinant--majority felt not any less safe than live/modified
- --killed: very safe

Exceptions: Site Rxs

Autogeneous: too little safety testing

Q2: Efficacy:

Defined by label claim

- --high confidence in label claim;
- --high concern over changes in serotypes and efficacy;
- --practioners--need standardization of label terminology--information supplied by firms;
- --to educate practioners on product claims;

Diagnostic kits: specificity/sensitivity/reproductibility confidence high

Exception: autogenous--no efficacy testing;

Q3: Availability:

Readily available to appropriate users

APHIS: strong point is ability to get products to market for emerging diseases;

Q4: What's working? What's not?

Testing--prelicensing--limited resources affect turnaround time;

Inspection--consistency of reviewers/inspectors and level of review;

- -- Licensing--prelicensing--much improved in last year; minor still longer than 5 yrs. ago;
- --APHIS very accessible;
- --QC training---xxx among firms, using similar methods, APHIS provided international reference reagent;
- --New emerging technology DNA/recombinant vaccines: more stringent requirement/but consistent;

Group 16: Kathleen Bell: 301-948-7755 ext. 157 kbell@kpl.com

Q1: Safety:

- --Sort of confident--confident for products that have been around for a long time;
- --Safety issues are not a problem w/ licensed products;
- --Small number of animals in trials--lucky that there haven't been any safety issues;
- --Need protocols for the correct number of animals;
- --Without post-market surveillance program how can you know about safety after licensure;
- --Would like causality assessment--did the vaccine cause the problem;
- --Is the measuring stick that is used by USDA appropriate?
- --Rules set up @ usda; are they appropriate?
- -- Target animal safety isn't always used for licensure--autogenous vacines;
- --Delivery methodology;
- -- Need a consistent protocol for safety studies for all products;
- -- Need a definition of safety;
- --Post Marketing Surveillance program--would like causality assessment;

Q2: Efficacy:

- --More concern over measurements of efficacy;
- -- No consistent protocol for efficacy of products;
- -- Need standardization;
- -- Duration of immunity--how long is the product efficacious?
- -- Need education program with vets;
- --Field efficacy: USDA does not accept field efficacy, but that is how the vaccine is measured as efficacious

Q3: Availability:

- --It depends on what perspective you're coming from--vet, manufacturer, owner;
- -- Can't give one word answer

Q4: What works well? What doesn't?

Works well: meeting emergency needs in the field;

Cooperative review;

one on one licensing process; Generally a good process;

Licensing process is efficient in some instances, even w/ downsizing;

Inspections are reasonable--well-prepared;

All located in one location is good;

Doesn't: Electronic submissions;

Labeling criteria too stringent;

APHIS move from Quality Assessing to Quality Manager-- to shift responsibility

of assessing quality to the firms;

Consistency of standards to all firms & between reviewers;

Streamline 103.3 authorization;

SAMs & regulations need updating; conversion of 9CFR to GMP format;

Group 17: Don Sawyer: 2031 Tomahawk Rd. Okemoa, MI 48864-2130: 517-349-0454

Q1: Safety:

- --Feline sarcome--low incidence of side effects--100 for that owner;
- --Safe from temporal standpoint--expectations have changed;
- --Poultry vaccines very safe;
- --All approved biological products;
- -- Customer determined what's safe;
- --Sarcomas--perception--more recognition; reporting network--cause & effect;
- --Reaction to injection--no pain-no gain;
- --Overall products are very safe--fibrosarcoma, expectations have changed;

Q2: Efficacy:

- --Autogenous vaccines may/may not--not a long term solution;
- --Great deal of variation--bacterial vs. viral: not 100%--90% minimum protective dose;
- --Population control to outbreak of disease;
- -- Efficacy better with nonstress-vs stress;
- --Control systems much better today--customer more aware;
- --Proper use;
- --Room for improvement, expecially with bacterial products;
- --Expectation of owner--explain from veterinarian;

Q3: Availability:

--Very much available;

- -- Cost of development same for increased use or decreased use;
- -- Economics control availability;
- --Not as available for minor species;
- -- Market driven;
- --More available today--owners may not know how to manage, mixing vaccines;
- --Regulatory cost inhibiting for low value products;

Q4: What works? What doesn't?

<u>Working well:</u> Inspecting, testing, lab process, speed and standards, communication (disagreement--less so with some reviewers), best to inform as to process--transparent;

<u>Not working well:</u> licensing process slow, reviewing protocols greater than 2 months, expectation of fixed time--2 weeks - 2 months;

Review process: reengineering needed--external & internal;

Review of a small part: results in whole outline reviewed (own worst enemy);

Harmonization?

Serial Release testing? (waste of time)

Group 18: Cindy Tripp: Heska Corp. 970-493-7272 ext. 4049 trippc@heska.com

Q1: Safety:

Yes, but are areas to look at for improvement. (Risk vs. Benefit Evaluation)

- 1. vet education for feline sarcoma;
- 2. stability on shelf for full-time of product life;
- 3. Safety of adjuvanted product, particularly older products currently licensed; rx rates, size of reaction, duration;
- 4. More defined criteria for verify--lack of reversion to virulence;

Q2: Efficacy:

- --Examples of non-efficacy of a licensed product demonstrated in the field wasn't addressed in a timely manner--erysipelas (sp?), equine flu--vaccination occurring on monthly basis--what is the DOI.
- --Real time DOI--does field represent "real DOI" for products that don't currently have real time DOI; i.e., should there not be a concern in generating real-time DOI because we don't see a problem in the field situation with protection breaks;
- --Education of practioners/communication/lack of complaince @ user level;

Q3: Availability:

Minor species may not be adequately addressed, but is an economic issue, and requirements (gov't.) which ultimately contributes to cost contributes to non-availability;

Q4: What's working? What's not?

CVB should draw on expertise in academia, industry, other sources, to update/evaluate policy; Incorporate new science into existing requirements in more timely manner;

--Be more proactive in incorporating science into the licensing system;

- --Industry be more interactive in providing well-prepared & comprehensive input/material/submissions to gov't.
- --CVB testing
- --Access to reviewer; must be receptive and must approach us verbally rather than want to exchange paper;
- --site visit to industry locations to see first hand operations of manufacturing (expansion of exisiting program used for new reviewers);
- --UK has different approach to batch release; don't retest vaccine work at level of inspecting QA/QC on regular basis;
 - --OA
 - --QC=proper validation; reference requalification;
 - --time & money saver; 50% cheaper than retesting cost;
 - --based on better communication & mutual trust;
- --Communication

Group 19: Ron DeLellis (402)441-2182

Q1: Safety:

- --Generally vaccines safe if used appropriately, per label;
- ---Repeated vaccination of companion animals may cause a problem when revaccinated;
- --Serums may not be safe, if not used frequently;

Q2: Efficacy:

- -- The serotypes in some products (e.g. swine) may not be what is found in field. Homologous challenges may not be typical of what is found in field;
- --Vaccine interference testing may not be sufficient;
- --Some academic groups may recommend to the public different requirements than what companies put on label;
- -- Efficacy tests do not include "positive controls" (like FDA) USDA should QA all pivotal tests;
- --USDA should standardize challenges and *route*;

Q3: Availability:

Yes to question 3 except all species not available (e.g. bison, sheep, etc.)

Q4: What works? What doesn't:

Positives: Feedback at public meeting like this one is excellent;

Good standardized license inspections;

Submission time has improved since moved to Ames;

SAM testing is good; Web page is good;

Negatives: Web page not updated frequently;

Speed of response after review not good--use federal express;

Require more in vitro testing to decrease animal use;

CVB and REAC need to talk;

Outline reviews--new outlines get higher degree of scrutiny than old outlines. Standardize review process; Reviewer preferences noted; *DEREA* Act has not been appropriately implemented by USDA as required.

Group 20: Hans Draayer 860-441-8830

Q1: Safety

- --U.S. biologics are considered by us as the safest in the world, evidence suggest no major safety problem exists;
- --Market will not allow non-safe products (not apply when only one product);
- --Safety requirements (i.e. irradiation) can lead not less safe products;
- --Still room for improvements: injection site reactions/MLV safety;
- -- Move toward IN/oral;
- --Look at safety testing and relevance of ie.d two animal safety test (example);
- -- Industry does a good job of policing itself;
- --EU perception may not be the same as domestic;
- --Noticeable adverse reactions in companion are considered more unacceptable whereas livestock is more a balance of safety and efficacy (tied to profits vs. pets)
- --USDA standard are considered minimal and most firms exceed;

Q2: Efficacy

- -- Efficacy of gram negative bacterial may be in question;
- --Efficacy means effectiveness through the label DOI;
- -- Consumers expect 100% efficacy, firms license as significant or 80% efficacy;
- -- Efficacy in challenge model vs real life efficacy--works both ways;
- -- Efficacy comparisons between firms is not realistic;
- --Playing field should be level--DOI supported by challenge (annual revaccination claim)
- --cost vs benefit needs to be considered;
- --Where will longer vaccination intervals lead to for companion animals and how will we address this?
- --Is there a need for field efficacy studies and how do you demonstrate?
- --NVSL needs to work more on stability testing;
- --Producers (i.e. swine and poultry) want a product to show and economic benefit;
- --Producers only pay so much for a vaccine;
- --Difficulty in getting proper animals do minimum age seronegative studies;
- --Poultry expects 100% efficacy plus economic benefit also pet owners and to some extent swine;
- -- Consumer education can be improved as to how to handle and administer vaccines;
- -- Can we improve labels (easier, less effort, universal)

Q3: Availability

- -- Vaccines are readily available to consumers and veterinarians;
- -- There are state to state limitations for consumer availability;
- --Feeling is there is a lot of product abuse by non-veterinarians;

O4: What works? What doesn't?

Process: too much reliance on SAMs, outdated, don't work w/ newer products;

CVB testing speed is good;

Why can't company provide specific pieces of validated equipment for specific tests:

Testing level-most are comfortable;

Do we need batch release for GMP firms--or reduced test levels;

Inspection: Move toward GMP is evident in recent inspections--are there grounds for this?

Lot of variability in inspectors (i.e. same as reviewer consistency)

Inspection system is strong for international considerations

Has training changed?

Licensing: --Minor species--should there be funds for minor species?

- --Process may be too difficult to get certain products in the market;
- --Small firms sometimes get crunched by large firms;
- --It would be nice to have firm response dates (i.e. 30, 60, or 90 days) to facilitate planning;
- --More licensing guidelines are required for specific products including diagnostics;
- --Some guidelines are not keeping up with technology;
- --Is an FDA system (i.e.funnel to expert for specific submission) better than a dedicated reviewer or more than one reviewer per firm;
- --Reviewer consistency is still considered a problem by some;
- --Support that packaged submissions should be a rule not a suggestion;
- --We like Ames;
- --Mixed comment--more regulation on veterinarian produced autogenous, and better enforcement of current regulations (no uniform agreement on this issue);

Group 21: Vicki RappGabriels: Schering Plough: 612-289-6104

O1: Safety

- --Feel that adequate controls are built in the licensing process (killed & MLV);
- --Safety problems which do occur may be due to not following label recommendations or use in conjunction with other products;
- --Field safety--no requirement that groups selected represent the diversity of the population; (naive vs previously exposed, the genetic breeds, immunological status); Group agreement on this point.

Q2: Efficacy

There were two points in group and NO AGREEMENT on this;

- 1. Reference Requalification: arbitrary extension granted (others felt too broadly applied); Hopes: new regulations--address and enforce consistency;
- 2. Initial efficacy--recognize the diverse populations of bacterial strains or virun strains. Serotypes--cause disease (if information is available); homologous/hetero challenge requirement Not suggest a firm regulation but Question should be asked--involve--label claims, marketing; Also ability to quickly respond to changie in population causing diseases;

Q3: Availability

Group recognizes occasional problems of availability--often due to manufacturing issues. Not due to prelicensing or post-licensing regulatory issues.

Q4: What's working? What's not?

Licensing: No concerns w/ LPD;

<u>Inspection/compliance:</u> need to work more closely with the firm regarding the testing and reporting of testing back to the user when product complaints occur;

<u>Laboratory:</u> (Group Consensus)--lab must recognize that most tests developed by firm are unique--product-specific; developed after long optimization and validation process (in-house); There are no consistent requirements for transfer of technology to the lab--or for validation of the process in the lab. Assumption has been that with the reagent and the S.O.--the lab can run the test. Like to see more cooperation with the firm when tests are transferred.

Group 22: Dan Chladek: Boehringer, Ind. 816-390-0574

Q1: Safety (100% agreement)

- --Confident in product--generally considered to be safe;
- --Correlation between small animal vs large animal;
- --Overall program good-some products (oil) may cause problems that could be improved upon;
- --Different international standards:
 - --U.S. products standards are safer, esp. in breeding animals;
- --User education on use of multiple products;
- -- New agents in products;
- --Risk/benefit decision of efficacy/safety;
- --Implementation of a sound pharmacovigilance programs by company

Q2: Efficacy

- --Nothing (no vaccine) is a 100%--different environmental/management; depends on individual expectations of the user;
- --Basis of claims need to be evaluated. Need to look at cost-efficiency of using vaccines; different environment; (I did not agree)
- --Defining efficacy level in pivotal studies and educate public (of what products will do); poultry identified (1 person interested);
- --Relevance of challenge model: the difference between field and lab;

Q3: Availability

- -- Readily available to vet/animal owners;
- -- Too readily available through distribution chain; (half agreement)
- --Distributors/retailers of viologics need to follow regulations; (total agreement)
- --Training of vets on proper storage and use of products (biologics or pharm.) for animals; (total agreement)

- --Government approval process should be improved to get products (especially new ones) to market; (total agreement)
- -- Do conditional licensed products meet the requirements of being (unfinished thought);
- --Licensing of improved products need to be expedited; (total agreement)
- --Availability of autogenous product are more than adequate (total agreement);

Q4: What works? What doesn't

- -- CVB Testing: Improvement:
 - --One director for CVB; (6 of 8 agree)
 - --Stand alone unit does not report to VS;
 - --Meat Quality: inspectors at slaughter houses vs. licensing requirements for licensing products;
 - --Check testing at CVB is a waste: more emphasis on validation of process: checking during manufacturing: in-process checking;

Good: Inspection/compliance does a good job: batch release system is good;

Licensing needs more emphasis to improve efficiency--training is a key, need paraprofessional asistance:

CVB-L phone system needs to be improved;

Group 23: Steve Chu Fort Dodge: 515-955-9143

Illegible notes

Group 24: Mark Welter 515-251-5903

Q1: Safety

Confidence in safety:

- --Safety--good history when looking at number of doses sold vs reaction xxx;
- -- Testing via 9 CFR is a good assurance;
- --What is customer willing to pay for vs what type of product to get;
- --Look towards harmonization of safety testing and make telephone number available for all conumers on labels;

Safety of Product

- --Products failing but still in market;
- --Split manufacturing...where PIFF products are combined;
- --More educating for vets and producers. APHIS seems to evaluate how safety tests are conducted based on potential problems producers can give relative to administrative dose (e.g., safety concerns for oral poultry vs. equine IM;

Q2: Efficacy

- --Ranges of protection: 100%--80%--50%--label claims; give varying ranges of protection
- -- Need more data on duration of immunity;
- --APHIS shold consider doses sold and market value of products when univ. driven efficacy questions arise--APHIS could support industry better--increased participation;
- --Reference requalifications are they worth the cost? Some aspects increase our confidence in xxx the cost are drawing new product developments;

--Efficacy guidelines may need to vary based on target markets: poultry vs companion animal risk vs benefit ratio.

Q3: Availability

- --Fast track licensing for "new" dis. entities would assist in early assistance to producers; state by state and herd by herd;
- --Duplication of testing has slowed regulations of new products. Developed outside the U.S. A good example: some diagnostic kits vs new vaccines; risk vs. benefit; review differently;
- --Products are readily available--its new products for new disease entities that are not (due to length of licensing process;

Q4: What's working? What's not?

Working Well--best move is the move to Ames and centralization, helps in responsiveness; Turnaround time can be improved: example 1month for protocols vs longer time tables for xxx.

Prioritize quicker reviews. Fast track for: production outlines--minor changes; animal test protocols; licensing documents;

- -- Availability of reviewers;
- --Immunotherapeutics seem to be a conflict for APHIS and new guidelines are suggested;
- -- Can reach CVB-L or CVB IC and get an answer more quickly than if contacting CVB licensing;
- --Still some inconsistencies in reviewers, would like more specific guidance than general;
- --Reference invitro reaualification standards for APHIS are different than those for industry: example--time lines particularly invitro stnds.
- -- Understaffing, underbudget and possibility of user fees? Realizing industry doesn't want them;
- --How can CVB resolve this problem and get proper funds allocated;
- --CVB-L testing outside of production outline or 9 CFR needs to be addressed and firm needs to be contacted prior to test initiation.

Group 25: Mary Anne Williams: 619-451-3770

Q1: Safety

- --Feline sarcoma is probably related to FELV vaccine;
- --1 in 10,000 incidence;
- --Perhaps there is a genetic predisposition--evidence seems to indicate so;
- --Vets are truthful about limitation of vaccines;
- -- Large animal vaccines sometimes cause injection site lesions;
- --Inform consumers (vets & manufactures) of limitations;
- -- Proper education of clientele;

Summary statement: Group believes that veterinary biologics/vaccines are safe;

Honest, open, scientifically accurate communication between vets and manf. To clients regarding proper administration and realistic performance expectations of products and risk factors is important.

Q2: Efficacy

We are confident in the efficacy of biological products;

Proper education and communciation that no vaccine will completely protect 100% of the vaccinated animals 100% of the time. Again, its the responsibility of the manufacturer to communicate accurately, efficacy of the vaccine.

If vaccines are not efficacious, large animal producers wouldn't use it. We are confident that the system of licensing in place ensures that new products are efficacious. Efficacy of products has improved over time.

Q3: Availability

We believe that products are widely available. Products are, under the current regulatory system, affordable as well.

Q4: What works? What doesn't?

<u>CVB-LPD</u>: Concerns include: consistency in reviewers' requirements; inability of reviewers to make decisions w/out "committee" review; simplify the label approval process; reviewer workload is excessive--we see the need for additional reviewers to provide appropriate turnaround time;

<u>CVB-IC</u>: Timing of serial releases has improved (quick turnaround). Overall everyone seems to be please with CVB-IC;

<u>CVB-L</u>: Testing of product over and above Section V testing. Requirement to test "panels" which were not previously made available to firms (after reviewer approval);

Group 26: Cliff Frank: 619-451-3770

Q1: Safety

- --Manufacturers confident--trade off between efficacy/safety, comply with testing requirements;
- --Post marketing vaccinovigilance on autogenous--seen as a problem/loophole;
- --Field trial safety, prelicensing work seen as good--better job w/ vet products vs. human;
- -- "Customer" clueless about work done in product development--manufacturers recognize
- --Risk assessment for genetically engineered products: standards of performance high;

Q2: Efficacy

- --By-product by *strain*--good confidence--against all strains/challenges(?);
- --Older products (?): changes in environment;
- -- Products that don't work are not purchased;
- -- Economics:
- --Disease profile changed
- --Vets following label directions(?);

Summary: efficacy by product-good conficence if label followed;

APHIS--education, vigilence on older products, shift in disease;

Q3: Availability

- --Overall --good
- --Conditional licenses versus autogenous (?)--needs to be made more available;

--Orphan test kits (?);

Q4: What works? What doesn't?

CVB-L--has more input in decisions, making process thxxx they deserve or are qualified to provide; CVB-L has undue influence on reviewer;

Group 27: Kathy Graves 515-992-3842 ext 208

Q1: Safety

Off-label usage by end users can and do lead to safety xxx;

Adverse reactions caused by off-label use--tomorrow's issue;

Vaccine related sarcomas--feline leukemia and rabies;

Q2: Efficacy

Off-label use for economic concerns by dilution, esp. poultry

Duration of immunity information studies available for consumers; overdosing of animals; Vaccination in the face of disease outbreak--vaccine is seen as cureall--more education for vaccination programs;

Q3: Availability

Autogenous vaccines available and conditional licensing;

Minor species vaccinations are difficult to license;

New science approaches are difficult to move through regulatory bodies. The approach that vaccination/challenge studies are not always needed--other models can be used;

Q4: What's working? What's not?

- A) Should all firms be required to submit all serials for CVB testing? Streamline process/possibly an incentive for firms with good solid QA program;
- B) Greater coordination between offices now that they're in Ames;
- C) CVB-L testing outside of SAM or Special Outlines of Section V;
- D) Products in new licensing phase are tested outside section V without notification causing delays in licensing; review process earlier so issues can be handled;
- E) Notification of receipt of release paperwork at CVB-IC if delays are expected xxxx extension of dating;
- F) IC--different standards for different sized companies;

(Not consensus between points E and F)

- G) Attempt to have more uniformity between reviewers and inspectors;
- H) Use of real world animals in immunogenicity instead of sero-megative herds/animals;

Group 28: Vergil S. Davis lasher@ce.net 302-934-8745 (fax) 8700 (phone):

Q1: Safety

Re: safety--not an absolute; needs qualification of label:

endotoxin shock-pigs MLV, i.e. PRRS; off-label use;

OTC--broad category where there exists safety concern;

raw materials, esp. animal derived;

Cure: 1) more rapid accurate test methods;

2) more extensive testing;

Q2: Efficacy

Efficacy as in the case of safety needs qualification: a relative term, defined under very special conditions:

concerns: heterologous challenges (cross-protection w.r.t esp. to rapidly mutating agents)

Re-vax claims w/o sufficient testing;

DOI--length

Practitioners groups recommending label changes w/out data (organizations of

veterinarians);

efficacy tests in seronegative (recognize limitations); Field efficacy--standardization of challenge agents;

Q3: Availability

Yes--there exists delays;

Post-licensing test delays when internal safeguards are in place;

Low frequency of testing by CVB--invalid tests;

standardizing test-reagent and protocols for CVB-L especially when not codified;

Available markets worldwide (how can USDA facilitate--standardization);

Delay in reference requalification (1 yr-15 months)--no specific recommendations at this time;

Q4: What works? What doesn't?

Overriding: Need more uniformity firm-to-firm

Updating CFR;

Testing: CVB-L solicit firm's input on new tests in the beginning or welcome

firms overture to assist....SO...work toward self-release: recognize firm incentives

when standards are established net;

<u>Inspection</u>--self inspection, shorter inspection but more frequent;

Licensing--On generics for licensure, refer more to precedents within firms and

obviate need to review SO's, test procedures in fine detail;

<u>Labeling delays</u>--need labeling specialist, new staff reviewers;

One participant: Offered after the session the need for a training program for firms, concentrating on regulatory affairs (could be 1-2 weeks);

Group 29: Paul Hine 515-992-3842

Q1: Safety

- --User assumed marketed products are safe and efficacious;
- --User worried more about efficacy under various scenarios, but still worried about potential safety problems (know surveillance is in the works: more formal program)

- --Some animals will react--manufacturer should stand behind product; food animal scenarios (lose one occassionally) different from companion animals; but the producer (e.g. chickens) still bears the brunt (cost);
- --Oil adjuvants, etc.
- -- Meat safety/carryover? Go back to first assumption;
- --Killed vs. MLVs--track record is good (apart from isolated instances)
- --adventitious agents??

Q2: Efficacy

- --Artificial challenge vs real world scenario;
- --US: artificial challenge;
- --EU: field efficacy;
- --Should we (US) do field efficacy more?
- --Is current testing for licensure adequate?
- --Vets know real soon if something working or not:
 - --serotype differences;
 - --breed responses;
 - --alternative=autogenous (perceived to be good);

Q3: Availability

- --Cost: vets can charge what they want;
- --Public availability through suppliers, catalogues;
- -- Consumers not normally given choice of manufacturer;
 - --vets control supply: who controls vets?
 - --humans = generic vs brand;
- -- Cheaper to buy from one distribution point or one manufacturer (see orange sheet);

Q4: What works? What doesn't?

Well: pretty good but...

More cooperative than FDA;

Will act on real data (show them the data);

xxxx 9CFR allows both small and large companies to be producers (each serial tested, etc.) xxx GMP would drive small firms out of business;

<u>Needs Improvement:</u> More CVB people to speed up (get up to speed, then have more people) More reviewers, fewer inspectors,

Lack of recognition of new a;;lications/novel xxx outside of classical vaccines, diagnostics, etc.

Bioxxx peptides, immunomodulators, antibiotics,

State of science xxx rapidly--is CVB keeping up?

CVB being reactive rather than proactive;

Losing people to industry due to low pay;

Community Networking Session 2: Thursday Sept. 24, 1998

Group B: Butch Mercer 212-799-8755 butchmercer@biomark.net

This group identified priorities (high, medium, low) and group sense (one-some-most-all)

- -- Lack sufficient funding: allocation of funding, no user fee funding: High--All;
- --Maintain compliance--protect U.S. agriculture, quality products by all is a must; High--all
- --GMP--where does it fit?--product quality mgrs/not assessors--improved regulation by validation, routine testing; High--all
- --Vaccinovigilance is a waste of time; High--all
- --Harmonization--is it needed? Must be finished: have trained negotiators; Medium-all
- -- Training: be on cutting edge to deal with new technologies; High--all
- --Reagents (standardized): High--all
- --Streamline licensing process; High-all
- --Technology--computers?: strategic partnerships--use other agencies; High--all
- --Labeling standardization (uniformity and outlines) bogged down now; High--all

Group C: John Thomas 202-463-1260

- --CVB faces a crisis in funding--needs to look at functions and asses what is being done well and bad;
- -- Needs to do an audit of performance;
- --Need to review VST Act and decided what is required and what is "nice";

Functions:

- --licensing;
- --facilities inspection;
- --control unlicensed products (research, exports);
- --monitor product safety in field;
- --stop outlaws;
- --Can't do any of this without a systematic way to identify, assess, and integrate new technology and knowledge;
- --CVB and public need to consider: user fees, FDA take-over;
- --Recommends that CVB prepare several scenarios which describe ways to operate within resource limits--publish those and ask for comments and recommendations;
- --CVB needs to find ways to communicate with customer groups to learn about public perceptions;

Group D: Dr. Belinda Goff 233-4479/bsgoff@aol.com

- 1. Producers/vets need more information (timely) about problems with products (especially trends of problems in a particular company, for example)--so producers can make better purchasing/use decisions;
- 2. Vets/consumers assume that if product is licensed by USDA, then it is as good as any other product in that category--so they can just decide by price (e.g., BVD, PRRS, parvo products). Need to improve and standardize testing reagents at USDA.
- 3. Need to improve validity/reliability of research data (safety & efficacy) so that data integrity is good before USDA gets it to review:
 - a) company responsibility;
- b) USDA should just do checks of this, some inspection of study while it is happening (random checks?);

- c) USDA should continue improving lab quality (NVSL);
- d) this point is regarding "mistakes/omissions" not fraud;
- 4. Need for data integrity training of future industry and government personnel (expecially vets, grad and undergrad students) in school--can USDA or IICAB facilitate this?
- 5. Harmonization needs to be a critical focus and keep current awareness of status of it and take appropriate further action. How to best spread this info? web, trade journals?...

Group E-H-J: Mike Hall--Hy-Vac 515-992-4301

Harmonization and/or mutual recognition;

Biotechnology: regulation and technology stay together--mutual development;

<u>Electronic communication</u> between CVB and companies--fast tracking submissions-licenses, serials;

<u>Reviewers</u>: consistency between reviewers; reviewer evaluation periodically;mechanism for mediation of reviewer/reviewee impass;centralization to Ames will be helpful;

Mutual laboratory certification/validation: confidence in each others results;

<u>Pharmacovigilance</u>: less testing, more communication; more inspections, less testing; reduction in testing requirements for serial release;

<u>Financial constraints</u>: CVB and companies outside audit of CVB and their role in the future; problems of autogenous vaccines--poultry companies, swine companies--may be a food safety concern;

Group F: Jeff Kremer 4011 78th St. North, St. Petersburg, FL 33709 813-539-4436 This group Ranked priorities as High, Medium, Low

High: Mutual Recognition for internat'l products--harmonization takes too long;
Medium: A means of better educating companion animal families and veterinarians of

regulatory and biologics information;

Low: Concentrate on putting current knowledge into the business of regulatory

decisions discovery; (Most)

Medium: (Just a list of "players" in biologics arena also listed--please explain)

Reg. agency; large manufacturer, small manfufacturing org., vet medical assn,

government research, companion animal lover;

Group K: Joseph Curlee 608-277-2000

Reagents production and lab standardization--cross training /QA w/ labs (Medium); NVSL lab testing consistent with EU lab (Medium)

National/international reagent references (in vitro Pot) (High--100%);

Resources: High--100% (items 1-4)

- 1. Streamlining licensing/review of documents to decrease turnaround time;
- 2. Also include reviewer consistency/crosstraining, avenue to address conflicts w/ reviewer (dispute resolution);
- 3. Firms regardless of size or importance have equal opportunity w/ experienced reviewers;

- 4. Maintain full-staff:
- 5. Separate Vet Services from CVB--have 1 director for CVB (high, but only 50% agree);
- 6. Inspection/compliance to be trained in GMP compliance issues which they could point out deficiencies during inspections; (Medium priority)

Group L: Kathy Graves, Ambizo 515-992-3842

Resources:

- 1. Evaluation of good science in addition to VS policy;
- 2. Harmonization efforts and mutual recognition;
- 3. Revision of guidelines and add biotechnology--remove old guidelines that are not in use and outdated in 113; add new comprehensive biotechnology;
- 4. Role as educator:
- --Testing by firms not by CVB-L post licensure; validation of processes, some more away from in vitro assay models;

CVB Direction

- --Harmonization of efforts would assist sales for large and small firms alike--easier to add world markets to group;
- --Domestic harmonization: all on the same playing field; similar manufacturers with different testing need same testing guidelines possible SAM or sharing of information;
- -- Testing Situations
 - --firms vs. Lab testing conflicts --not same process;
 - --codified or SAM for similar methods for similar manufacturers:
 - -- DNA policies presented and established similar to Monday's sessions;
- --Evaluation of good science versus policy:
 - --Allow science to move policy;
- --Recombinants/cross portection without challenge study for purified transgenics the movement and other biotechnology;
- -- Add section to CFR;
- --Modify and update current CFR to remove outdated testing;
 - --immunomodulators and others;
 - --potency measurements need to be revisited as science progresses;
 - --validation of system to.....
- --CVB role as educator of end user of vaccine with all discussion of extra label use, it bears responsibility;

Group N: Tom Swieczkowski 207-873-3989 tomswiss@mainabiolab.com

5 year Plan:

- 1. International barrier for free trade:
 - -- Need for harmonization to take place at a quicker pace;
 - --Establish timetables--use better project mgmt.;
 - --Standardization of testing & reagents;

- 2. CVB together because of move: complete consolidation
 - --become more functional at a better pace;
- --possibly use IICAB to develop and maintain reagents and such for reference requalification;
 - --working towards partnering towards ind.
- 3. Major concern of certain issues like GMPs are being controlled by larger firms and are strong-arming CVB. CVB must make sure this is done fairly; (some disagreement on this point)
- 4. Political barriers
- 5. More efforts towards more standardization of regulatory requirements; more opportunities for training of individual personnel by CVB (like IICAB course for others);
- 6. Must take a serious look at est. structures and take a look at finite resources and how could it be reformulated to be operated more efficiencly;

Example: Eliminate heavy burden of testing and use those resources for more inspections insuring testing and license applications; possibility of restructuring to bring CVB under one Director;

10 year Plan

- 1. Some of the 5 year issues;
- 2. Continuation of reference and reagent programs and partnering relationships;
- 3. Work with individuals helping to create new markets; helping to develop new technologies;

Group P: Michael Piontkowski 303-295-7527: colorado-serum@worldnet.att.net

- 1. Simplify/streamline requirements for new products--every regulation value-added;
- 2. Focus on uniform testing/lab standardization within lab; new equipment, training of technology at lab:
- 3. Allow phased submissions with replies @ each stage submission;
- 4. Increase number of reviewers and decrease review time;
- 5. Tiered regulation for different species--maybe reviewers assigned to species-instead of class of products;
- 6. International harmonization--MRA;
- 7. Keep USDA separate from FDA;

Group Q: Madonna Carlson

- 1. More fundamental, perhaps even radical, changes to process need to be considered to cope with limited resources; (High--100% agreement)
- 2. Check-testing and sample submission is an archaic notion; it is a statistical abomination in most cases, and it should be ended in the next five years; (High-100%)
 - --use lab resources to support new product approval;
- --consistent with this, IC's needs to strengthen role in the organization relative to LPD; gradually become more important in the program related to the lab. Focus on QA systems in inspection;
- 3. Harmonization needs to move forward (or else resources devoted to it need to be reduced); Medium--100%

4. Licensing activities (especially FFM) will need to be addressed more efficiently in the future with APHIS to cope with changes in the business; Medium-100%

Group R: Laurie Fisher 402-441-2801

All five agreed on these four priorities; all 5 agreed on all priorities;

High Priority:

1. Quicker turnaround on dossiers: more reviewers and less inspectors

Higher control of upstage processing rather than final testing;

Reduce requirements for testing;

Efficiency of current operations to allow development of new technology--electronic transition-computerization; streamline current process;

Encourage more face-to-face presentation on new license applications and dossiers;

2. Increase technology base in the laboratory --allow industry to continue developing and not be so restrictive in growth; more pro-active in test development; uniform required standards for testing, development of national references;

Increase trust between regulators and industry by increasing the internal QA process. Trust needs to be earned by the companies--based on problems in the fields;

- 3. Harmonization must maintain a higher focus with a faster than slower timetable; Should be efforts to reach consensus should have high focus and quicker--less political agenda;
- 4. Establish GMP guidelines for the industry to facilitate international business-must include a general agreement on the definition of GMP internationally;

Next appears to be a list of miscellaneous thoughts. They were not numbered, however, there are some rankings of "low" and "medium":

- --vaccine will be produced in the field--new genetic technologies;
- --need to develop a biotehnology group to handle new technologies and testing;
- -- (Low): post licensing surveillance--program development (5 of 5 agree);
- --(Medium): reference requalification--harmonization between U.S. and EU on type of assay--invitro vs invivo; (low?) how to monitor references (5 of 5);
- --Keep IICAB program going;

Group S: Polly A. Hoogeveen, Pfizer Animal Health

5-10 year plan:

High Priority:

- --International harmonization through mutual recognition;
- --Electronic documentation management systems;

Medium Priority:

-- Develop firm incentive programs:

- --less inspections;
- --less sample submissions to CVB-L;
- --less check testing;
- --Improvement of quality and standardization of required test reagents;

Low priority:

- --Continue working on the Quality Assurance program at CVB-L: consistent testing and documentation;
- --Support more of an open minded environment for acceptance of alternative technologies when supported by scientific data;

Group T: Ralph Pierce Grand Labs. 712-477-2811 Ralph.L.Pierce@grandlab.com.

5 Year Goals:

- 1) Expand CVB-LPD to allow for a more timely review of submitted documents: e.g., 30 days
- 2) Specialization of LPD reviewers. For example, 1 reviewer would review efficacy reports, another field safety, etc. This would result in a more "level playing field."
- 3) Provide additional standardized procedures i.e. memorandums, SAMS, reagents etc.;
- 4) Provide list of biologicals needed worldwide;
- 5) Develop incentives for licensing biologicals for minor species;

10 Year Goals:

CVB provide qualified references for the industry;

Group U: Lois Hartstein Intervet Inc. 405 State Street P.O. Box 318 Millsboro, DE 19966 302-934-4262

5 Year Goals:

- 1. Expedite licensing processes;
- 2. scientific advances: Increase # of personnel/equipment to maintain biotech advancement
- 3. Increase government spending: implement user fees;

Standardization (lab)--stop final product testing;

provide references/reagents for testing standardization;

send samples to USDA upon request only;

Labeling--separate GRP to review/approve like FDA process;

Firms to manage their own serial release -- "GMP" acceptance;

10 Year Goals:

Harmonization--internationally;

USDA to monitor biotech advancement in industry;

Strive to keep up--specialists, equipment, organize and planning ahead;

Group V: Jennifer Conlon 706-549-1206

New Product Licenses:

1. New products out on market faster:

- --paperwork and regulations are slowing down process;
- --compress time to license product;
- --used to be 1.5 years--now 3-5 years;
- --We cannot get to FDA length of time;
- --spend more time and effort to smooth out licensing process;
- 2. Move from QC oriented to QA oriented focus--to reduce post license testing;
 - --eliminate post-licensing testing;
 - --manufacturers responsible fro release;

(not a consensus in the group;)

- 3. Improvement of new technologies/scientific research;
 - --new test methods;
 - --update of SAMs;
 - --development of universal standards;
 - --development of standard references to eliminate reference requalification studies;
- 4. Harmonization:
 - --strong stand on harmonization
 - --the next few years will be important to establish guidelines--must be present and be involved in the establishment of guidelines; streamline processes;
- 5. Less hands on--more audit:
 - --put responsibility in hands of company;
- 6. Use of other forms of communication--internet/ e-mail, fax document;

Group W: Cyril G. Gay 402-441-2916 gayc1@pfizer.com.

Ideas:

Increase reviewer knowledge on biotehnology, virology, immuniology;

- I: Focus on quality management systems, quality assurance;
- III: focus on development of standard test reagents, international stnds.;
- II: stop routine check testing;
- II: stop product serial release;

Systems xxx have to develop xxxx xxxxx;

- II: One director for the CVB, stand alone unit;
 - --continue move towards electronic submissions and document mgmt.;
- --be more direct and forward with what is required, e.g., memorandum 800.84, not --optional, make it mandatory;
- II: More administrative support: administrative group to review non-technical aspects of submissions:
 - --True specialized review sections; xxxxxx section should be responsible for reviewing all recombinant vaccine submissions;

Need more reviewers;

- II: Elimination of routine check testing and reallocate resources towards the review of submissions:
- I: Need CVB IC to do more thorough inspections ensuring that QC adequately tests the product and that systems and processes are validated;

Prioritization:

- 1) Need CVB-IC to do more thorough inspections to ensure that QC adeuqately tests production and raw materials and that systems and processes are validated; Focus on quality management systems and quality assurance. This should result in:
- 2. Elimination of routine sample submissions and check testing and reallocate resources towards the review of submissions. This should include relinquishing serial release responsibility to the firms. More administrative support is key. Administrative group should review non-technical aspects of submissions;
- 3. One director for all three CVB units; CVB should be a stand-alone unit reporting directly to the administrator of APHIS: Need more reviewers:
- 4. Increase reviewer knowledge on molecular biology, viralogy, and immunology (microbiology). Need true specialized sections within CVB-LPD; Thus,l the biotechnology section should be responsible for reviewing all recombinant vaccine submissions;
- 5. Focus on the development of standard test reagents and international stnd.;
- 6. continue move towards electronic submissions and document management;
- 7. CVB should be more direct and forward with what is required; e.g., memo 800.84; not optional, make it mandatory;

Group X--Debra Schlict Fort Dodge Animal Health 515-955-6061 ext 2109;

- 1. Because of need to compete in global market, focus on mutual recognition and harmonization regultory issues;
- 2. CVB reduce involvement in regulatory role and have confidence in industry compliance resources on other issues;
- 3. Direct efforts tomaintaining scientific and technical expertise and developing a standardization of evaluation process and maintain a consistency of reviewers;

Group Y--Mike Carter 402-289-6031 Schering-Plough

All--(1): a) Accelerate harmonization (bilateral and global) process for mutual recognition on inspection, regulations, testing, approvals;

This will allow firms that are exporting products to other nations to be able to comply with foreign requirements without having to do multiple tests to accomplish the same end (i.e., one purity test to satisfy any government agency rather than having to conduct the 9 CFR, EU pharmacopia, etc. depending on the country the product is intended).

All--(1): b) National standards for invitro testing;

This requires that reagent standards be available so that each firm must meet the same potency test requirements with using the same reference standards. A group such as IICAB could be contracted and funded (at least partially) by industry to provide reference reagents required by CVB-L and industry.

- All--(1): c) Do away with check test for batch release (QA rather than QC). Firm's QC labs use validated tests to carry out release tests; records audited on inspection; Firms that use validated QC methods and have a QA department that audits the QC and manufacturing procedures should not have to submit samples to CVB-L for confirmatory testing. The control records would be available for inspection on a timely basis (to be determined by APHIS).
- All--(2): d) Regular reevaluation of CVB program as we are doing at this focus group; Suggestion: Every public meeting (18 mos) intervals.
- All--(2): e) More visibility on study areas of CVB-L. Agreement between CVB and industry. Could use open mtg to report on active research;

 Several members of the group would like to know, and even have an opportunity for comment, re: study areas being conducted by CVB-L. The open meeting forum would seem to be an opportune time for comments on the studies.
- All--(3): f) CVB should be on forefront of scientific developments so that expertise for new products can be used and have faster review of new tech products; DNA excellent example and we applaud.

CVB-L should be at the fore front of new technologies to keep up with changes that are occurring in Industry. Doing away with check tests (see item (c)) could provide valuable resources needed to keep CVB-L at the fore front of the technological changes.

All-(3): Challenge 9 CFR to eliminate obsolete sections;

The 9 CFR is an old document and APHIS should go through and delete the sections that are not appropriate. Regulatory requirements change and the group would like for APHIS to determine that all of the requirements currently in force are necessary.

All-(3): Newer biometrical approaches for evaluating data; *This would require discussions between APHIS and Industry biometricians.*

In 10 years we see:

CVB-LPD with essentially same duties;

CVB-IC expanded role to review QC data primarily as check test system for batch release discontinued;

CVB-L Evaluate new products; Assist in CVB-IC inspections (providing technical expertise to evaluate newer testing and manufacturing changes.)

CVB would be a "regional" arm of global system for regulating bios world-wide;

Group Z--Janis McMillen 913-888-8876

1. Move away from a status quo mentality to accomplish the following:

- --harmonize internal CVB thinking;
- --harmonize internal standards for firms;
- --achieve shorter review time and consistency of reviews;
- --accept new technology and new ways of doing things;
- 2. Put more focus and effort in inspection and compliance, and eliminate product testing (use risk analysis as necessary);
- 3. More transparency in testing and testing requirments;
- 4. Increase investment in new technology at the lab and with electronic medium;
 - --speed testing, provide international efforts;
 - --increase communications on major topics;
- 5. Continue harmonization efforts;
- 6. Organizational changes:
 - --Single director for CVB, to facilitate consistency of goals;
 - --Single veterinary regulatory agency: APHIS-CVM-FSIS;